

## ABSTRACT

The present invention provides a fuel supply system which can supply fuel accurately in accordance with driving conditions, while achieving cost reduction by adopting an inexpensive pump without a fuel return passage for returning surplus fuel.

A positive displacement pump which intakes and discharges a specific volume of fluid is adopted as the fuel pump 40, and discharges the amount of fuel needed for the injector 30 to inject. The fuel pump 40 is located outside the vapor separator 20. The discharged fuel from the fuel pump 40 is supplied to the injector 30 through the returnless pressure regulator 50. With this structure, the temperature rising of the fuel in the vapor separator 20 due to disposing the high pressure fuel pump and the pressure regulator within the vapor separator 20 can be prevented, and the connecting passage for connecting the pressure regulator and the vapor separator can be eliminated.